



MEETING INVITATION

DC POWERING ARCHITECTURE FOR DATA CENTERS: WHAT'S IN IT FOR YOU?

What: Plant Tour and Stakeholders Discussion

When: Thursday, August 4, 2005

Where: Pentadyne Power Corporation 20750 Lassen Street Chatsworth, CA 91311

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WHY ATTEND?

An alternative approach to conventional AC power uses a DC power distribution scheme throughout a data center. Most data center server racks are not currently powered this way, but with the advent of servers on the market that can operate with either AC or DC, it is possible that it would make sense to use the DC powering approach, thus eliminating the extra power conversion steps and their associated losses. Possible additional benefits include reduced cooling needs, higher equipment densities, and reduced heat-related system failures.

DEMONSTRATION GOAL AND OBJECTIVES

You are invited to join a stakeholder group that will help to investigate:

1. Whether or not DC powered server(s) and/or server racks can provide the same level of functionality and computing performance when compared to similarly configured and operating servers (and/or server racks) containing AC power supplies, as measured with industry standard measurement devices and software bench-marking tools.
2. Demonstrate any efficiency gains from the elimination of multiple conversion steps in the delivery of DC power to the server hardware.
3. Write or adopt guidelines for testing and specifying these products.

NEXT STEPS

As one of the invitees to the first stakeholder meeting, your input will help guide the California Energy Commission in its mission to identify cost-effective opportunities for energy savings in the high-tech environment. The CEC works to identify and help to realize the result from energy-conserving research through research institutions such as Lawrence Berkeley National Laboratories. See: <http://hightech.lbl.gov/datacenters.html>, for additional information

Please join us for a plant tour of the Pentadyne Corporation's Chatsworth CA, facility to see their current powering scheme and participate in this very important discussion

Project Contacts

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AGENDA

9AM- 10AM: Welcome and Introduction

10AM - 12N: DC-UPS Demonstration and General Discussions

12N - 1PM: Lunch

1PM - 3PM: Stakeholders meeting – Items to be discussed include:

- What would you as a stakeholder like to see as part of this study for DC Power systems in high tech environments? What are your specific interests
- What would you (or your organization) as a stakeholder be willing to contribute in regard to time, money, manpower, equipment, etc. - in support of this DC power system study? And what type of results and/or recognition and/or role would you and your organization like to see as part of this study team?
- Do you feel that DC power distribution in high tech environments is a viable alternative to today's system topologies if substantial energy and heat savings can be achieved in a DC power distribution system?
- Would you as a stakeholder be interested in contributing to the development of standards, codes, etc. for high voltage DC power distribution system for high tech environments?

LOCATION

